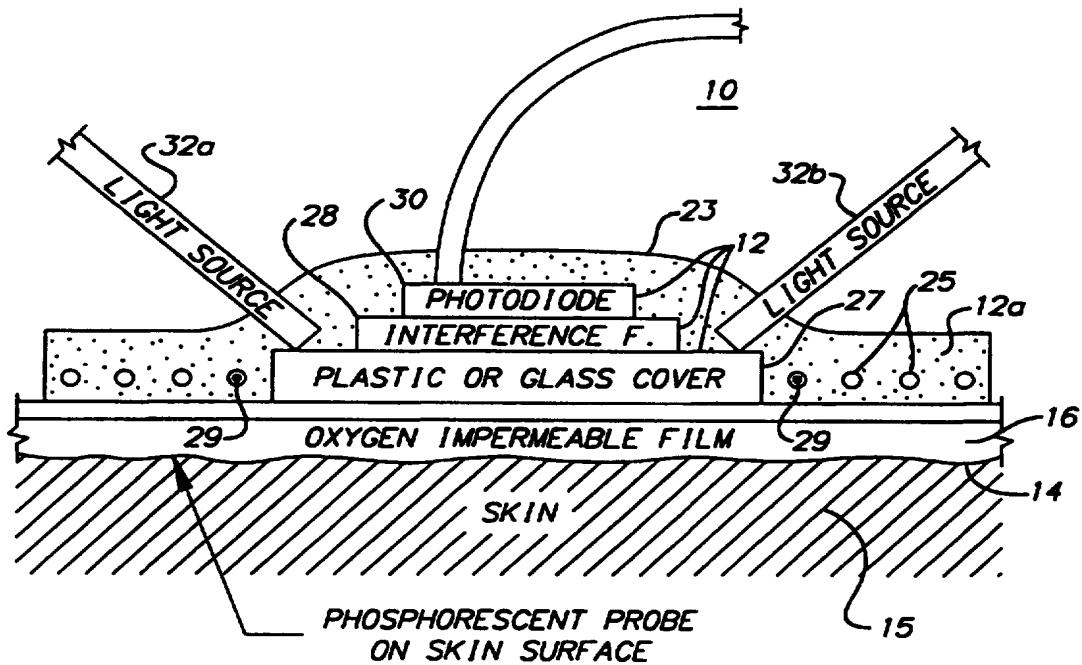


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(54) Title: DEVICE AND METHOD FOR MEASURING TISSUE OXYGENATION THROUGH THE SKIN USING OXYGEN DEPENDENT QUENCHING OF PHOSPHORESCENCE



(57) Abstract

Apparatus and method for measuring tissue oxygenation using oxygen dependent quenching phosphorescence. The apparatus (10) comprises a phosphorescent probe (14) applied to the surface of the skin (15); an oxygen impermeable film (16) placed over the probe (14) and the apparatus (10); a light excitation means (12) for exciting the probe (14); a heating element (22) for heating the probe (14); and an analyzer circuit (26) for analyzing the output.

